

STORMWATER MANAGEMENT PLAN (SWMP) FOR MINOR PROJECTS

The County of San Diego Watershed Protection, Storm Water Management, and Discharge Control Ordinance (WPO) (Ordinance No. 9424) requires all applications for a permit or approval associated with a Land Disturbance Activity must be accompanied by a Storm Water Management Plan (SWMP) (section 67.804.f). The purpose of the SWMP is to describe how the project will minimize the short and long-term impacts on receiving water quality.

The WPO does not set a minimum size or type of project requiring a SWMP. The following types of projects/permits are generally not significant contributors to pollution loading after construction is complete:

Construction Right of Way Permits, Encroachment Permits, Minor Excavation Permits, Variances, Boundary Adjustments, Minor Use Permits for Cellular Facilities, and Residential Tentative Parcel Maps.

As such, these projects may not require post construction Best Management Practices (BMPs) that require long-term maintenance. This form is to be submitted for these types of projects to fulfill the SWMP requirement of the WPO (section 67.804.f). It is a living document that can be modified at any time even after construction is complete. Changes to the SWMP are documented on the attached Addendum sheet.

Please be aware that completion of this form does not remove the applicant's responsibility from addressing BMPs during construction. If it is determined during the review process that the project has the potential to significantly impact water quality after construction, then a more detailed SWMP will be required that addresses post-construction BMPs.

Please describe the proposed project.

Project Name: William Residence

Permit Number: P03-134; WN7506; CP 18225

Project Details: Unmanned wireless facility transmitting/recieving station used for personel communication devices.

Project Location: Fallbrook

Assessors Parcel No.: 121-330-08

Address: 5240 San Jancito Circle West, Fallbrook CA 92028

Hydrologic Unit*: Hydrologic Unit 903.11 - 903.32

Hydrologic Subarea**: 903.11 San Luis Rey River

Any previous stormwater action: No

SDC DPLU RCVD 07-12-04

ZC #038

* Hydrologic Unit and Area may be determined from the maps found at the following link:
http://www.projectcleanwater.org/html/ws_map.html

** Hydrologic Subarea may be determined from the maps found at the following links:
<http://www.stormwater.water-programs.com/Webctswpfinal/Indexfinal.htm>;
http://endeavor.des.ucdavis.edu/wgsid/wblist.asp?region_pkey=9

Unique Site Features: (Check all that apply.)

- ☐ Project is in a river, creek, or lake.
- ☐ Directly discharges to a river, creek, or lake.
- ☐ Project is 200 feet from a river, creek, or lake.
- ☐ Runoff will directly discharge into a storm drain.
- ☒ There are no unique site features.

Individual designated as stormwater protection contact for the permit.

Name: William Lynch
Address: 6160 Corner Stone Court Suite 150
City, State, ZIP: San Diego, Ca. 92121
Phone Number: 858-228-2659
Cellular Phone Number: 619-228-5155
Fax Number: 858 228 2010

A. CONSTRUCTION PHASE

1. Potential Pollutant Sources During Construction: (Check all that apply.)

- ☒ There will be soil-disturbing activities that will result in exposed soil areas. This includes minor grading and trenching.
- ☐ There will be asphalt paving including patching.
- ☒ There will be slurries from mortar mixing, coring, or PCC saw cutting and placement.
- ☐ There will be solid wastes from PCC demolition and removal, wall construction, or form work.
- ☐ There might be stockpiling (soil, compost, asphalt concrete, solid waste) for over 24 hours.
- ☐ There will be dewatering operations.
- ☐ There will be temporary on-site storage of construction materials, including mortar mix, raw landscaping and soil stabilization materials, treated lumber, rebar, and plated metal fencing materials.
- ☒ There might be trash generated from the project.
- ☐ This project will involve activities that are not considered to generate pollutants. Includes placement of temporary signs (i.e. elections, events).

2. List the construction BMPs that may be used: (Check all that apply.)

The BMPs selected are those that will be implemented during construction of the project. The applicant is responsible for the placement and maintenance of the BMPs selected. Attach descriptions of the BMPs and their application (available at the DPW counter) as Attachment A.

- | | |
|---|---|
| <input checked="" type="checkbox"/> Silt Fence | <input type="checkbox"/> Desilting Basin |
| <input type="checkbox"/> Fiber Rolls | <input type="checkbox"/> Gravel Bag Berm |
| <input type="checkbox"/> Street Sweeping and Vacuuming | <input checked="" type="checkbox"/> Sandbag Barrier |
| <input type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Material Delivery and Storage |
| <input type="checkbox"/> Stockpile Management | <input type="checkbox"/> Spill Prevention and Control |
| <input type="checkbox"/> Solid Waste Management | <input checked="" type="checkbox"/> Concrete Waste Management |
| <input checked="" type="checkbox"/> Stabilized Construction Entrance/Exit | <input type="checkbox"/> Water Conservation Practices |
| <input type="checkbox"/> Dewatering Operations | <input type="checkbox"/> Paving and Grinding Operations |
| <input type="checkbox"/> Vehicle and Equipment Maintenance | |
| <input type="checkbox"/> Any minor slopes created incidental to construction and not subject to a major or minor grading permit shall be protected by covering with plastic or tarp prior to a rain event, and shall have vegetative cover reestablished within 180 days of completion of the slope and prior to final building approval. | |
| <input type="checkbox"/> No BMPs needed. Activities are not considered to generate pollutants. | |

B. POST-CONSTRUCTION PHASE

ATTENTION: THIS PROJECT MAY BE EXEMPT FROM POST CONSTRUCTION BMP REQUIREMENTS IF ONE OR MORE OF THE FOLLOWING THREE STATEMENTS APPLY.

(Check all that apply.)

- ☐ My project is not located within the County Urban Area as defined by the map that is in Appendix B of the County Watershed Protection, Stormwater Management and Discharge Control Ordinance (map on file with the Clerk of the Board as document number 0768626), AND my project will not route stormwater run-off into or through an underground conveyance other than a road-crossing culvert. I have attached project plans that show the location of this project, and that demonstrate that stormwater run-off will be carried above ground only, except at road crossings.

IF YOU CHECKED OFF THE STATEMENT ABOVE, SKIP TO ITEM D. OTHERWISE COMPLETE ALL REMAINING SECTIONS.

- ☐ My project is physically complete or substantially complete, and the prior work on the project has all been done pursuant to or as required by a valid County permit or approval. The permit or approval I am seeking is not related to the construction of any stormwater management device, and will not be followed by any additional construction that will increase the impervious surface of this project or change the post-construction uses of the project area. I have attached photographs showing the current state of construction in the areas of the project to which this application for a permit or approval applies.

- ☒ My project has no potential to add pollutants to stormwater after construction is complete, AND will not affect the flow rate or velocity of stormwater run off after construction is complete. I have attached project plans that demonstrate that the project will not significantly increase impervious surfaces in the project area and will not add any impervious surfaces that are directly connected to the stormwater conveyance system. These plans also show the anticipated post-construction use of the project area. I understand that this application will not be exempt from the requirement to submit a post-construction stormwater management plan if County staff conclude that these post-construction uses of the project area have the potential to add pollutants to stormwater after construction is complete. I acknowledge that at such time that staff makes this determination, I shall be notified and required to submit the appropriate post-construction SWMP.

List the post-construction BMPs that will be used: (Check all that apply.)

- ☐ There will be permanent landscaping as part of this project. The property owner will maintain the landscaping.
- ☐ Asphalt concrete will be placed over the disturbed areas designated as roadway or parking lots.
- ☐ PCC will be placed over the disturbed areas designated as either roadway, parking lots or building pads.
- ☐ Rock slope protection will be placed along channel banks.
- ☐ Outlet Protection/velocity dissipation devices will be placed at storm drain outfalls to reduce the velocity of the flow.
- ☐ This project will result in a reduction of the amount of asphalt concrete or PCC within the project.
- ☐ Either asphalt concrete, PCC or porous pavement will be placed over a dirt driveway.

C. MINISTERIAL PERMITS (Per Part G.8 of Ordinance No. 9426)

Please complete this section C if the proposed project is a discretionary permit subject to future ministerial permits, be aware that additional requirements may have to be fulfilled in order to satisfy the requirements of the WPO.

Provide information for the following steps to determine the impervious area for this project:

- A. Total size of construction area 300 ft² (Acres or ft² whichever is appropriate.)
- B. Total impervious area (including roof tops) before construction 0 ft² (Acres or ft²)
- C. Total impervious area (including roof tops) after construction ~200 ft² (Acres or ft²)
- Percent impervious before construction: $B/A =$ _____ %
- Percent impervious after construction: $C/A =$ _____ %
- ☐ For proposals that increase impervious surface, a detailed drawing showing drainage from these surfaces being directed to flat vegetated areas not less than 15 feet wide in the

direction of runoff flow. A detailed drawing of the proposed activity showing that it will not occupy any of the areas currently used for surface drainage flow, filtering, or infiltration.

- ☐ New walkways, trails, and alleys and other low-traffic areas shall be constructed with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, or granular materials that allow infiltration.

If the proposed project is subject to future ministerial permits, please be aware that additional requirements may have to be fulfilled in order to satisfy the requirements of the WPO.

D. ATTACHMENTS

1. Please Attach a Project Map or Plan.
2. If applicable, construction BMPs from Caltrans Storm Water Quality Handbooks Construction Site Best Management Practices Manual, November 2000. Available at the DPW Counter, 5201 Ruffin Road, Suite B, San Diego, CA 92123 or on the Internet at www.ca.gov/hq/construc/stormwater.html

APPLICANT'S CERTIFICATION OF SWMP

I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

Date

William Lynch - Project Manager

858-228-2659

Name and Title

Telephone Number

STOP

**The following addendum sheet is only to be completed if changes to the
Stormwater Management Plan for Minor Projects form
Is necessary.**

ADDENDUM SHEET

Please fill in

Date: Williams Residence
Project Name: Williams Residence
Permit Number: P03-134; WN7506; CP 18225
Project Location: Fallbrook
Address: 5240 San Jacinto Circle, West
Address: _____
City, State, ZIP: Fallbrook, CA 92028

A modification to the SWMP is necessary for the following reason(s):

Addition of requested information - attachment of project plan,
BMP's; Site features, Hydrological Unit & Subunit; New
applicant contact information

I certify under a penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

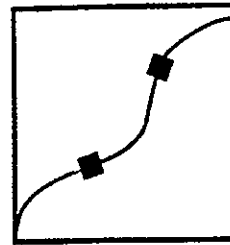
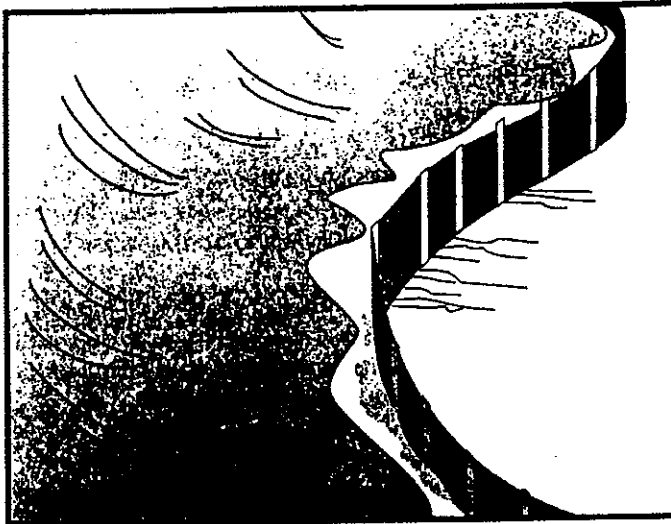
Date

William Lynch - Project Manager

858-228-2659

Name and Title

Telephone Number



BMP Objectives

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

Definition and Purpose A silt fence is a temporary linear sediment barrier of permeable fabric designed to intercept and slow the flow of sediment-laden sheet flow runoff. Silt fences allow sediment to settle from runoff before water leaves the construction site.

Appropriate Applications Silt fences are placed:

- Below the toe of exposed and erodible slopes.
- Down-slope of exposed soil areas.
- Around temporary stockpiles.
- Along streams and channels.

- Limitations**
- Not effective unless trenched and keyed in.
 - Not intended for use as mid-slope protection on slopes greater than 1:4 (V:H)
 - Must be maintained.
 - Must be removed and disposed of.

Standards and Specifications *General*

- Don't use below slopes subject to creep, slumping, or landslides.
- Don't use in streams, channels, or anywhere flow is concentrated.
- Don't use silt fences to divert flow.

Design and Layout

- The maximum length of slope draining to any point along the silt fence shall be 61 m (200 ft) or less.
- Slope of area draining to fence shall be less than 1:1 (V:H).
- Limit to locations suitable for temporary ponding or deposition of sediment.
- Fabric life span generally limited to between five and eight months. Longer periods may require fabric replacement.
- Silt fences shall not be used in concentrated flow areas.
- Lay out in accordance with Page 5 of this BMP.
- For slopes steeper than 1:2 (V:H) and that contain a high number of rocks or large dirt clods that tend to dislodge, it may be necessary to install additional protection immediately adjacent to the bottom of the slope, prior to installing silt fence. Additional protection may be a chain link fence or a cable fence.
- For slopes adjacent to water bodies or Environmentally Sensitive Areas (ESAs), additional temporary soil stabilization BMPs shall be used.

Materials

- Silt fence fabric shall be woven polypropylene with a minimum width of 900 mm and a minimum tensile strength of 0.45-kN. The fabric shall conform to the requirements in ASTM designation D4632 and shall have an integral reinforcement layer. The reinforcement layer shall be a polypropylene, or equivalent, net provided by the manufacturer. The permittivity of the fabric shall be between 0.1 and 0.15 sec/in conformance with the requirements in ASTM designation D4491.
- Wood stakes shall be commercial quality lumber of the size and shape shown on the plans. Each stake shall be free from decay, splits or cracks longer than the thickness of the stake or other defects that would weaken the stakes and cause the stakes to be structurally unsuitable.
- Staples used to fasten the fence fabric to the stakes shall be not less than 45 mm long and shall be fabricated from 1.57 mm or heavier wire. The wire used to fasten the tops of the stakes together when joining 2 sections of fence shall be 3.05 mm or heavier wire. Galvanizing of the fastening wire will not be required.

Installation

- Generally, silt fences shall be used in conjunction with soil stabilization source controls up slope to provide effective control.
- Trenches shall not be excavated wider and deeper than necessary for proper installation of the temporary linear sediment barriers.
- Excavation of the trenches shall be performed immediately before installation of the temporary linear sediment barriers.
- Construct silt fences with a set-back of at least 1m from the toe of a slope. Where a silt fence is determined to be not practicable due to specific site conditions, the silt fence may be constructed at the toe of the slope, but shall be constructed as far from the toe of the slope as practicable.
- Construct the length of each reach so that the change in base elevation along the reach does not exceed $\frac{1}{3}$ the height of the barrier; in no case shall the reach exceed 150 meters.
- Cross barriers shall be a minimum of $\frac{1}{3}$ and a maximum of $\frac{1}{2}$ the height of the linear barrier.
- Bottom of the silt fence shall be keyed-in.
- Install in accordance with Page 5 of this BMP.

Maintenance and Inspection

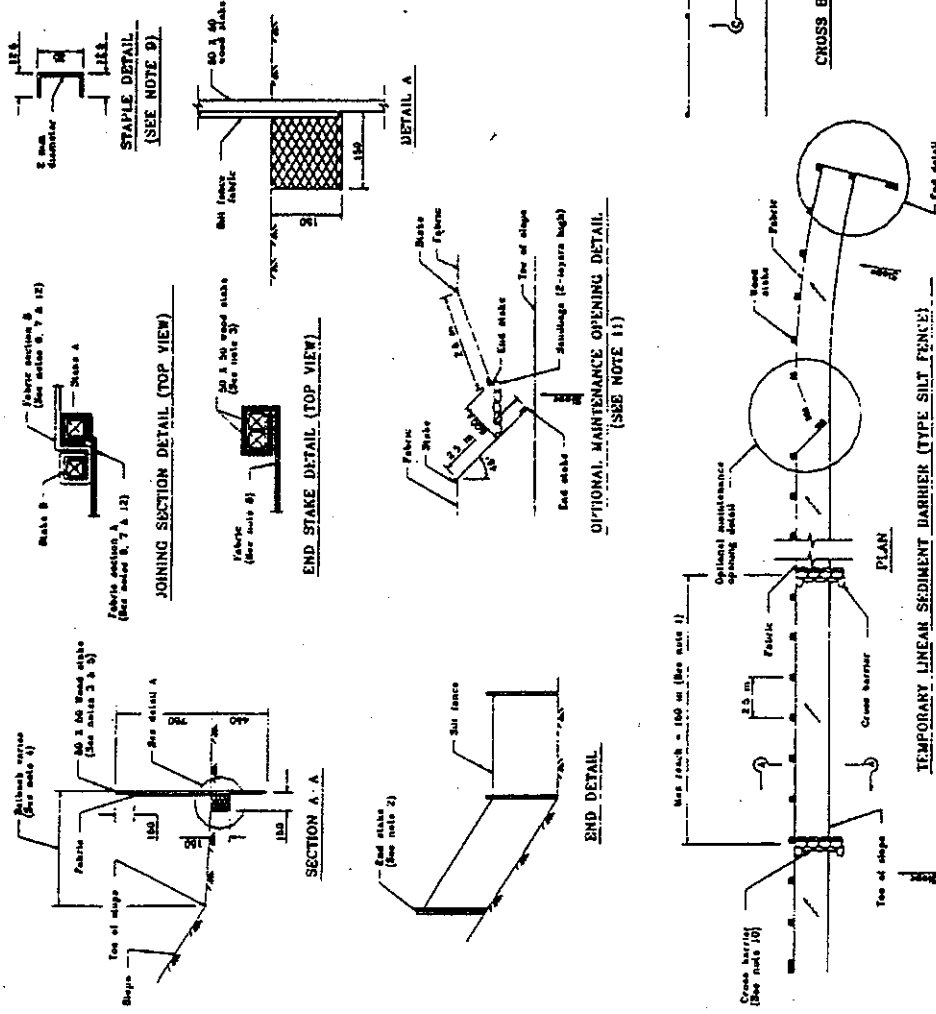
- Repair undercut silt fences.
- Repair or replace split, torn, slumping, or weathered fabric.
- Inspect silt fence when rain is forecast. Perform necessary maintenance, or maintenance required by the Resident Engineer (RE).
- Inspect silt fence following rainfall events. Perform maintenance as necessary, or as required by the RE.
- Maintain silt fences to provide an adequate sediment holding capacity. Sediment shall be removed when the sediment accumulation reaches one-third ($\frac{1}{3}$) of the barrier height. Removed sediment shall be incorporated in the project at locations designated by the RE or disposed of outside the highway right-of-way in conformance with the Standard Specifications.
- Silt fences that are damaged and become unsuitable for the intended purpose, as determined by the RE, shall be removed from the site of work, disposed of outside the highway right-of-way in conformance with the Standard Specifications, and replaced with new silt fence barriers.



- Holes, depressions or other ground disturbance caused by the removal of the temporary silt fences shall be backfilled and repaired in conformance with the Standard Specifications.
- Remove silt fence when no longer needed or as required by the RE. Fill and compact post holes and anchorage trench, remove sediment accumulation, and grade fence alignment to blend with adjacent ground.

Silt Fence

SC-1



NOTES

1. Construct the length of each section so that the change in slope is gradual along the entire length and extend 1/2 the length of the barrier to the toe of the slope.
2. The top 2.5 m of fabric shall be turned up slope.
3. Stake dimensions are nominal.
4. Dimensions may vary to fit field conditions.
5. Stakes shall be spaced at 2.5 m maximum and shall be positioned on downstream side of fence.
6. Stakes to tension and fence fabric to fold around each stake are full turn. Secure fabric to stakes with 4 staples.
7. Stakes shall be driven tightly together to prevent penetration of sediment behind the fence.
8. For end stakes, fabric shall be folded around two stakes and full turn and secured with 4 staples.
9. Minimum 4 staples per stake (maximum shown per typical).
10. Fabric height shall be a minimum of 1/2 and a maximum of 1 1/2 the height of the barrier.
11. Maintenance openings shall be constructed at a distance to ensure sediment remains behind and fence.
12. Joining sections shall not be placed at ramp locations.
13. Staking rope and bays shall be used to eliminate bays.

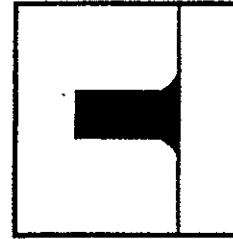
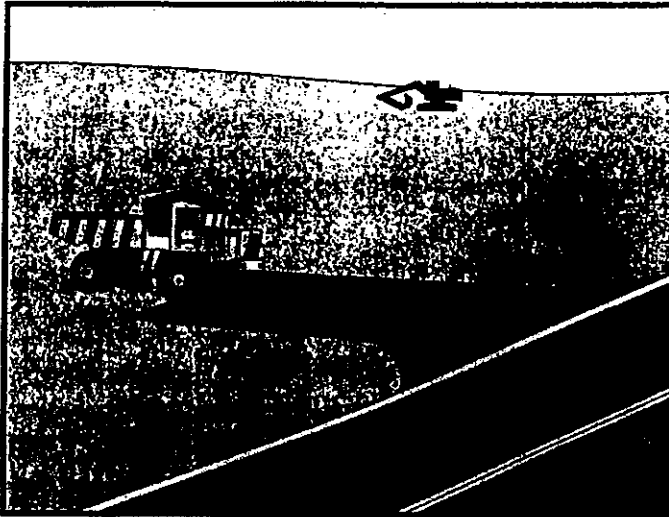
LEGEND

- Target location
- Stake location
- Direction of flow

TEMPORARY LINEAR SEDIMENT BARRIER (TYPE SILT FENCE)

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN





BMP Objectives

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

Definition and Purpose A stabilized construction access is a defined point of entrance/exit to a construction site that is stabilized to reduce the tracking of mud and dirt onto public roads by construction vehicles.

Appropriate Applications

- Use at construction sites:
 - where dirt or mud is tracked onto public roads
 - adjacent to water bodies
 - where poor soils are encountered
 - where dust is a problem during dry weather conditions.
- This BMP may be implemented on a project-by-project basis in addition to other BMPs when determined necessary and feasible by the Resident Engineer (RE).

Limitations

- Site conditions will dictate design and need.

Standards and Specifications

- Limit the points of entrance/exit to the construction site.
- Limit speed of vehicles to control dust.
- Properly grade each construction entrance/exit to prevent runoff from leaving the construction site.
- Route runoff from stabilized entrances/exits through a sediment-trapping device before discharge.

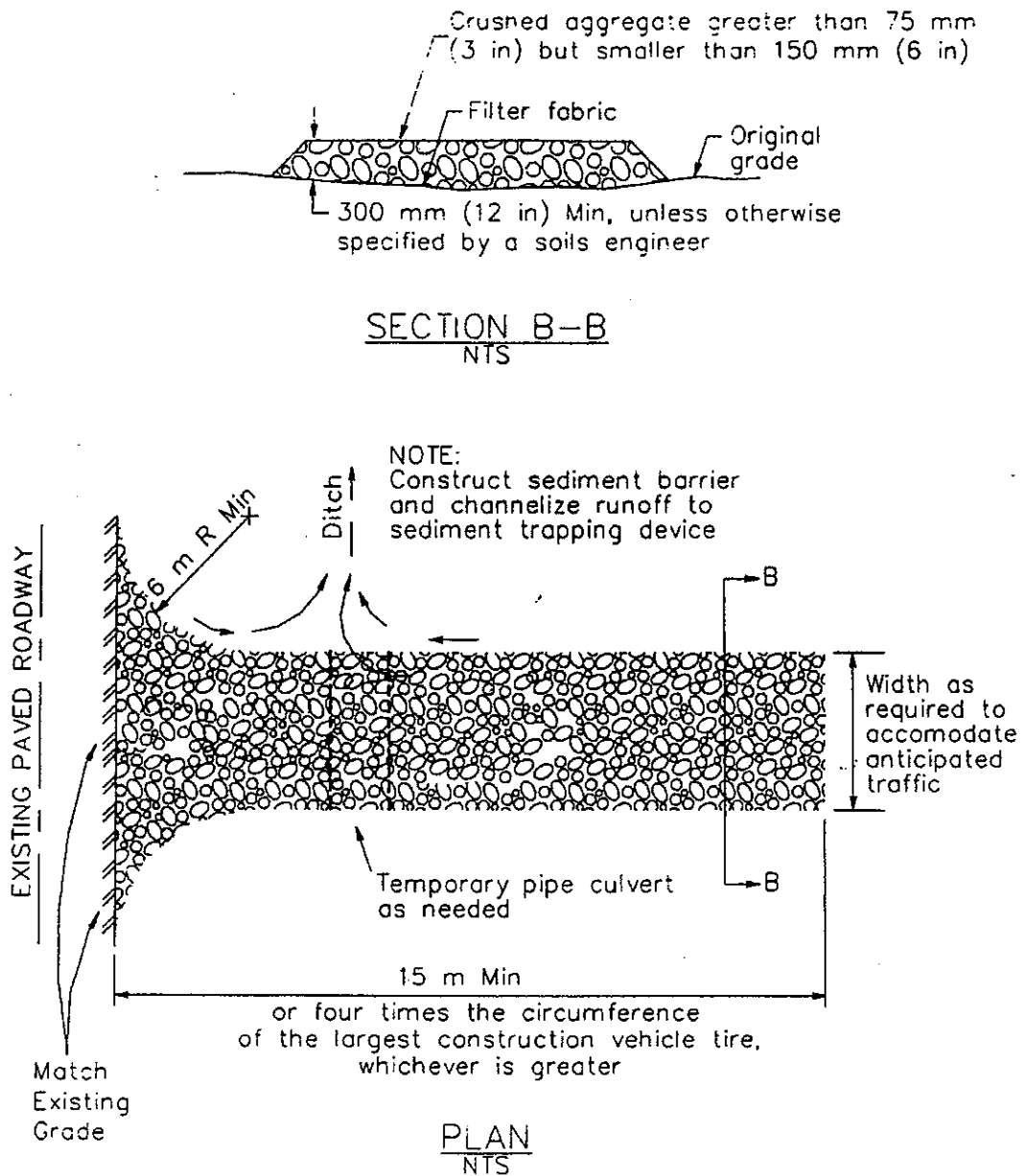


- Design stabilized entrance/exit to support heaviest vehicles and equipment that will use it.
 - Select construction access stabilization (aggregate, asphaltic concrete, concrete) based on longevity, required performance, and site conditions. The use of asphalt concrete (AC) grindings for stabilized construction access/roadway is not allowed.
 - Use of constructed or constructed/manufactured steel plates with ribs for entrance/exit access is allowed with written approval of the RE.
 - If aggregate is selected, place crushed aggregate over geotextile fabric to at least 300 mm (12 in) depth, or place aggregate to a depth recommended by a geotechnical engineer. A crushed aggregate greater than 75 mm (3 inches) but smaller than 150 mm (6 inches) shall be used.
 - Designate combination or single purpose entrances and exits to the construction site. Require all employees, subcontractors and others to use them.
 - Require that all employees, subcontractors, and suppliers utilize the stabilized construction access.
- Maintenance and Inspection
- Inspect routinely for damage and assess effectiveness of the BMP. Repair if access is clogged with sediment or as directed by the RE.
 - Keep all temporary roadway ditches clear.



Stabilized Construction Entrance/Exit

TC-1

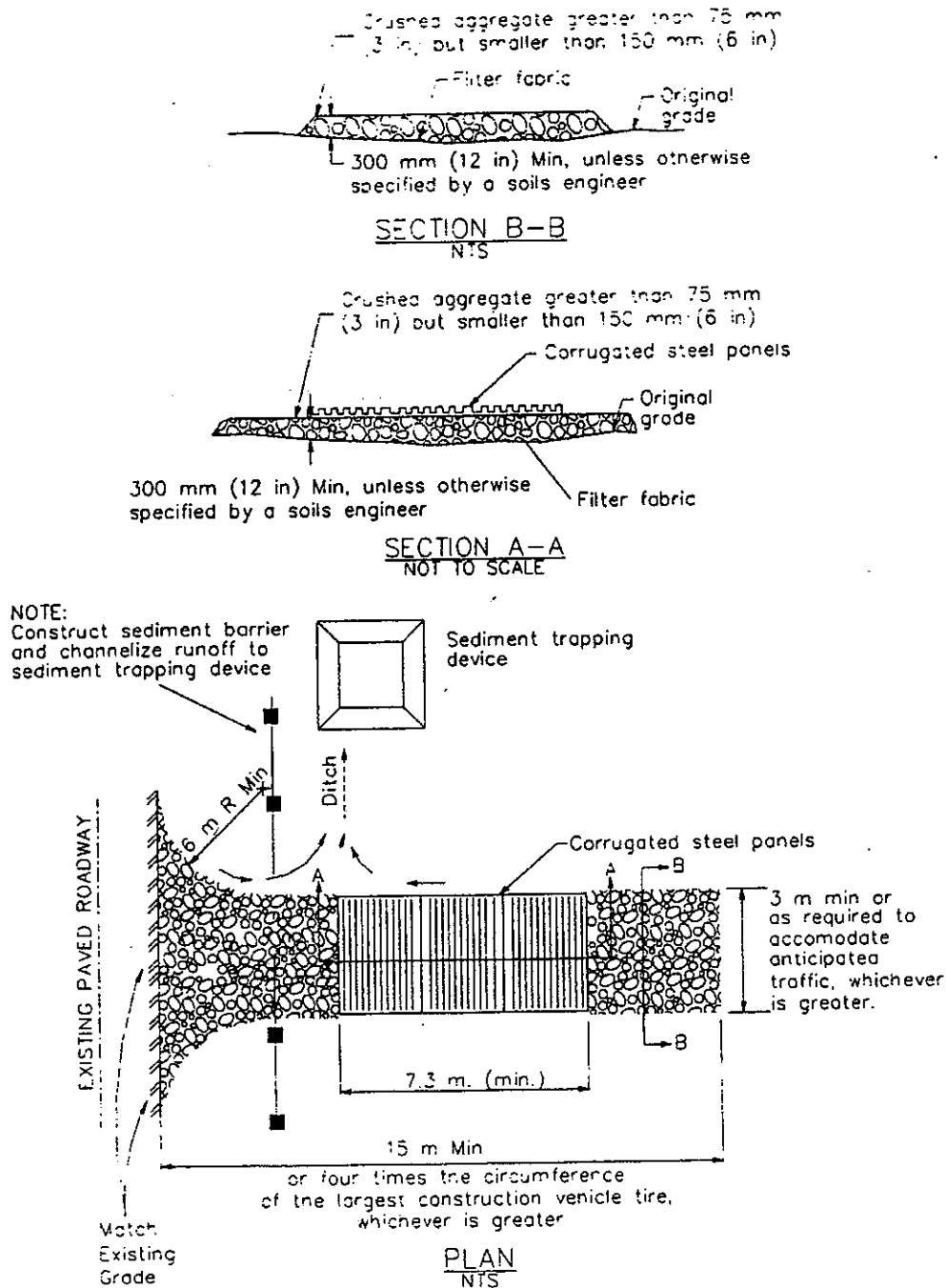


Stabilized Construction Entrance/Exit (Type 1)



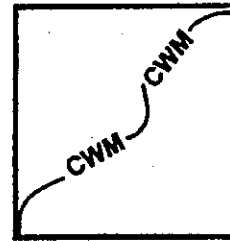
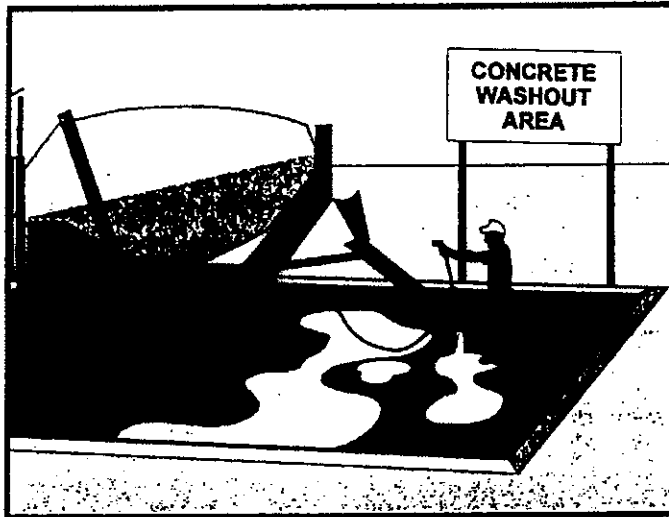
Stabilized Construction Entrance/Exit

TC-1



Stabilized Construction Entrance/Exit (Type 2)



**BMP Objectives**

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

Definition and Purpose These are procedures and practices that are implemented to minimize or eliminate the discharge of concrete waste materials to the storm drain system or to watercourses.

- Appropriate Applications**
- Concrete waste management practices are implemented on construction projects where concrete is used as a construction material or where concrete dust and debris result from demolition activities.
 - Where slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from sawcutting, coring, grinding, grooving, and hydro-concrete demolition.
 - Where concrete trucks and other concrete-coated equipment are washed on site, when approved by the Resident Engineer (RE). See also NS-8, Vehicle and Equipment Cleaning.
 - Where mortar-mixing stations exist.

Limitations None identified.

Standards and Specifications *Education*

- Educate employees, subcontractors, and suppliers on the concrete waste management techniques described herein.
- The Contractor's Water Pollution Control Manager (WPCM) shall oversee and enforce concrete waste management procedures.

Concrete Slurry Wastes

- PCC and AC waste shall not be allowed to enter storm drains or watercourses.
- PCC and AC waste shall be collected and disposed of outside the highway right-of-way in conformance with section 7-1.13 of Standard Specifications or placed in a temporary concrete washout facility.
- Disposal of hardened PCC and AC waste shall be in conformance with Section 15-3.02 of the Standard Specifications.
- A sign shall be installed adjacent to each temporary concrete washout facility to inform concrete equipment operators to utilize the proper facilities.
- Below grade concrete washout facilities are typical. Above grade facilities are used if excavation is not practical.
- Do not allow slurry residue from wet coring or saw-cutting AC or PCC to enter storm drains or receiving waters by:
 - Placing temporary berms or sandbags around coring or saw-cutting locations to capture and contain slurry runoff.
 - Placing straw bales, sandbags, or gravel dams around inlets to prevent slurry from entering storm drains.
- Vacuum slurry residue and dispose in a temporary pit (as described in Site Temporary Concrete Washout Facility, Concrete Transit Truck Washout Procedures below) and allow slurry to dry. Dispose of dry slurry residue in accordance with BMP WM-5, "Solid Waste Management", or, for on-site disposal, in accordance with Standard Specification 15-3.02, Removal Methods.
- Collect residue from grooving and grinding operations in accordance with Standard Specifications Section 42-1.02 and 42-2.02, "Construction."

On-site Temporary Concrete Washout Facility, Transit Truck Washout Procedures

- Temporary concrete washout facilities shall be located a minimum of 15 m (50 ft) from storm drain inlets, open drainage facilities, and watercourses, unless determined unfeasible by the RE. Each facility shall be located away from construction traffic or access areas to prevent disturbance or tracking.
- A sign shall be installed adjacent to each washout facility to inform concrete equipment operators to utilize the proper facilities. The sign shall be

installed as shown on the plans and in conformance with the provisions in Section 56-2, "Roadside Signs", of the Standard Specifications.

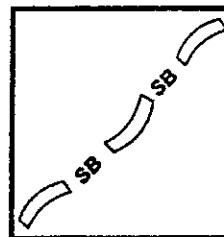
- Temporary concrete washout facilities shall be constructed above grade or below grade at the option of the Contractor. Temporary concrete washout facilities shall be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.
- Temporary washout facilities shall have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
- Perform washout of concrete trucks in designated areas only.
- Once concrete wastes are washed into the designated area and allowed to harden, the concrete shall be broken up, removed, and disposed of per BMP WM-5, "Solid Waste Management", and in conformance with the provisions in Section 15-3.02, "Removal Methods", of the Standard Specifications. Dispose of hardened concrete on a regular basis.
- Temporary Concrete Washout Facility (Type Above Grade)
 - Temporary concrete washout facility (type above grade) shall be constructed as shown on the plans, with a recommended minimum length and minimum width of 3m, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, at the Contractor's expense, upon approval of the RE.
 - Straw bales, wood stakes, and sandbag materials shall conform to the provisions in BMP SC-9, "Straw Bale Barrier".
 - Plastic lining material shall be a minimum of 60 mil polyethylene sheeting and shall be free of holes, tears or other defects that compromise the impermeability of the material.
 - Portable delineators shall conform to the provisions in Section 12-3.04, "Portable Delineators", of the Standard Specifications. The delineator bases shall be cemented to the pavement in the same manner as provided for cementing pavement markers to pavement in Section 85-1.06, "Placement", of the Standard Specifications. Portable delineators shall be applied only to a clean, dry surface.
- Temporary Concrete Washout Facility (Type Below Grade)
 - Temporary concrete washout facility (type below grade) shall be constructed as shown on the plans, with a recommended minimum

length and minimum width of 3m (10 ft). The quantity and volume shall be sufficient to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, at the Contractor's expense, upon approval of the RE. Lath and flagging shall be commercial type.

Removal of Temporary Concrete Washout Facilities

- Maintenance and Inspection

- When temporary concrete washout facilities are no longer required for the work, as determined by the RE, the hardened concrete shall be removed and disposed of in conformance with the provisions in Section 15-3.02 of the Standard Specifications. Materials used to construct temporary concrete washout facilities shall become the property of the Contractor, shall be removed from the site of the work, and shall be disposed of outside the highway right-of-way in conformance with the provisions in Section 7-1.13 of the Standard Specifications.
 - Holes, depressions or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and repaired in conformance with the provisions in Section 15-1.02, "Preservation of Property," of the Standard Specifications.
 - The Contractor's Water Pollution Control Manager (WPCM) shall monitor on site concrete waste storage and disposal procedures at least weekly.
 - The WPCM shall monitor concrete working tasks, such as saw cutting, coring, grinding and grooving at least weekly to ensure proper methods are employed.
 - Temporary concrete washout facilities shall be maintained to provide adequate holding capacity with a minimum freeboard of 100mm for above grade facilities and 300mm for below grade facilities. Maintaining temporary concrete washout facilities shall include removing and disposing of hardened concrete and returning the facilities to a functional condition. Hardened concrete materials shall be removed and disposed of in conformance with the provisions in Section 15-3.02, "Removal Methods," of the Standard Specifications.
 - Existing facilities must be cleaned, or new facilities must be constructed and ready for use once the washout is 75% full.



BMP Objectives

- Soil Stabilization
- Sediment Control
- Tracking Control
- Wind Erosion Control
- Non-Storm Water Management
- Materials and Waste Management

Definition and Purpose

A sandbag barrier is a temporary linear sediment barrier consisting of stacked sandbags, designed to intercept and slow the flow of sediment-laden sheet flow runoff. Sandbag barriers allow sediment to settle from runoff before water leaves the construction site. Sandbags can also be used where flows are moderately concentrated, such as ditches, swales, and storm drain inlets (see BMP SC-10, Storm Drain Inlet Protection) to divert and/or detain flows.

Appropriate Applications

- Along the perimeter of a site.
- Along streams and channels.
- Below the toe of exposed and erodible slopes.
- Down slope of exposed soil areas.
- Around stockpiles.
- Across channels to serve as a barrier for utility trenches or provide a temporary channel crossing for construction equipment, to reduce stream impacts.
- Parallel to a roadway to keep sediment off paved areas.
- At the top of slopes to divert roadway runoff away from disturbed slopes.
- To divert or direct flow or create a temporary sediment basin.
- During construction activities in stream beds when the contributing drainage area is less than 2 ha (5 ac).

- When extended construction period limits the use of either silt fences or straw bale barriers.
- Along the perimeter of vehicle and equipment fueling and maintenance areas or chemical storage areas.
- To capture and detain non-storm water flows until proper cleaning operations occur.
- When site conditions or construction sequencing require adjustments or relocation of the barrier to meet changing field conditions and needs during construction.
- To temporarily close or continue broken, damaged or incomplete curbs.
- This BMP may be implemented on a project-by-project basis in addition to other BMPs when determined necessary and feasible by the Resident Engineer (RE).

Limitations

- Limit the drainage area upstream of the barrier to 2 ha (5 ac).
- Degraded sandbags may rupture when removed, spilling sand.
- Installation can be labor intensive.
- Limited durability for long term projects.
- When used to detain concentrated flows, maintenance requirements increase.

Standards and Specifications

Materials

- Sandbag Material: Sandbag shall be woven polypropylene, polyethylene or polyamide fabric, minimum unit weight 135 g/(four ounces per square yard), mullen burst strength exceeding 2,070 kPa (300 psi) in conformance with the requirements in ASTM designation D3786, and ultraviolet stability exceeding 70 percent in conformance with the requirements in ASTM designation D4355. Use of burlap is not acceptable.
- Sandbag Size: Each sand-filled bag shall have a length of 450 mm (18 in), width of 300 mm (12 in), thickness of 75 mm (3 in), and mass of approximately 15 kg (33 lb.). Bag dimensions are nominal, and may vary based on locally available materials. Alternative bag sizes shall be submitted to the Resident Engineer (RE) for approval prior to deployment.
- Fill Material: All sandbag fill material shall be non-cohesive, Class 1 or Class 2 permeable material free from clay and deleterious material, conforming to the provisions in Section 68-1.025 "Permeable Material," of



the Standard Specifications. The requirements for the Durability Index and Sand Equivalent do not apply. Fill material is subject to approval by the RE.

Installation

- When used as a linear control for sediment removal:
 - Install along a level contour.
 - Turn ends of sandbag row up slope to prevent flow around the ends.
 - Generally, sandbag barriers shall be used in conjunction with temporary soil stabilization controls up slope to provide effective control.
 - Install as shown in Page 4 of this BMP.
- When used for concentrated flows:
 - Stack sandbags to required height using a pyramid approach as shown in Page 4 of this BMP.
 - Upper rows of sandbags shall overlap joints in lower rows.
- Construct sandbag barriers with a set-back of at least 1m from the toe of a slope. Where it is determined to be not practicable due to specific site conditions, the sandbag barrier may be constructed at the toe of the slope, but shall be constructed as far from the toe of the slope as practicable.

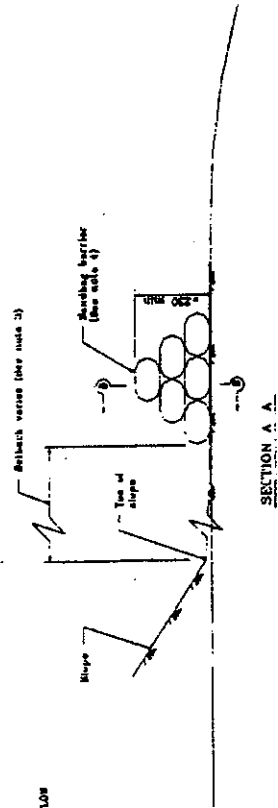
Maintenance and Inspection

- Inspect sandbag barriers before and after each rainfall event, and weekly throughout the rainy season.
- Reshape or replace sandbags as needed, or as directed by the RE.
- Repair washouts or other damages as needed, or as directed by the RE.
- Inspect sandbag barriers for sediment accumulations and remove sediments when accumulation reaches one-third the barrier height. Removed sediment shall be incorporated in the project at locations designated by the RE or disposed of outside the highway right-of-way in conformance with the Standard Specifications.
- Remove sandbags when no longer needed. Remove sediment accumulation, and clean, re-grade, and stabilize the area.



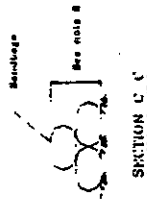
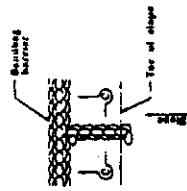
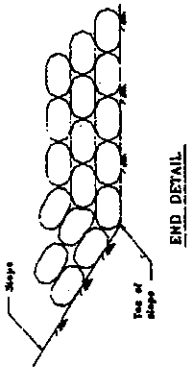


LEGEND
DIRECTION OF FLOW

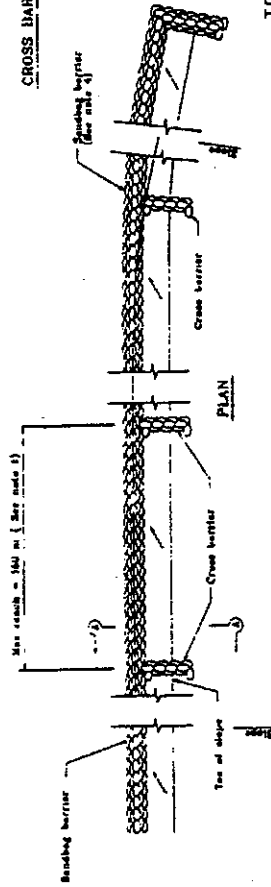


NOTES

1. Construct the length of each reach so that the change in base elevation along the reach does not exceed 1/2 the height of the linear barrier. In no case shall the reach length exceed 150 ft.
2. Place sandbags lightly.
3. Staggering may vary to fit field conditions.
4. Sandbag barrier shall be a minimum of 4 bags high.
5. The end of the barrier shall be tapered up slope.
6. Cross barriers shall be a min of 1/2 and a max of 4/3 the height of the linear barrier.
7. Sandbag runs and layers shall be staggered to eliminate gaps.



CROSS BARRIER DETAIL



TEMPORARY LINEAR SEDIMENT BARRIER (TYPE: SANDBAG)

TEMPORARY LINEAR SEDIMENT BARRIER (TYPE: SANDBAG)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
NO SCALE
ALL DIMENSIONS ARE IN
MILLIMETERS UNLESS OTHERWISE SHOWN



SPECIFICATIONS

THE INSTITUTE OF ARCHITECTS DOCUMENT CONTRACT FOR CONSTRUCTION ARE AS IF COMPLETELY REPRODUCED HEREIN.

TELECOMMUNICATIONS SITE AND IS QUIRREMENTS.

THE CONTRACTORS PARTICIPATING IN THE PROJECT, WITH THE CONSTRUCTION CONDITIONS AND CONFIRM THAT THE PROJECT PRIOR TO PROCEEDING WITH THE PROJECT, OR DISCREPANCIES BE SHALL IMMEDIATELY NOTIFY CINGULAR ARCHITECT IN WRITING. IN THE PROJECT SHALL INCLUDE THE MORE: 1. BID, UNLESS SPECIFICALLY DIRECTED BY THE ARCHITECT AND THE PROJECT MANAGER AND GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE TO REPAIR OR CORRECT ALL.

FIGURED DIMENSIONS HAVE AND DETAIL DRAWINGS HAVE. CONTRACTOR SHALL CHECK THE FIELD, UNLESS SPECIFICALLY NOTED, OR BEGIN ANY CONSTRUCTION DIMENSIONS HAS BEEN VERIFIED.

CINGULAR WIRELESS PROJECT MANAGER ARE CONSIDERED IMPRACTICAL, OF, OR NOT WITHIN CUSTOMARY FORMED, IT WILL BE ASSUMED THAT THE DETAILS ARE INTENDED TO SHOW MINOR MODIFICATIONS MAY BE AND SHALL BE INCLUDED AS PART OF THE WORK.

TO BE JOINED SHALL BE VERIFIED BY THE ARCHITECT. IF THEY DIFFER FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT SO THAT MODIFICATIONS WITH THE WORK.

USED ON THE DRAWINGS ARE: 1. IF THE CONTRACTOR HAS MEANING, THE CINGULAR WIRELESS PROJECT SHALL BE NOTIFIED FOR THE PROJECTS WITH THE WORK.

2. PAY FOR PERMITS, LICENSES AND EXPENSE OF THE WORK AND INCLUDE TO CINGULAR WIRELESS.

AND DIRECT ALL WORK, USING HIS ALL BE SOLELY RESPONSIBLE FOR ALL ORDINANCES, PROCEDURES AND ALL PORTIONS OF THE WORK UNDER THE PROJECT.

BE OF THE BEST QUALITY OF THE OR EXCEED THE FOLLOWING MINIMUM: 1. AND PROFESSIONAL CONSTRUCTION.

TRACTORS ASSOCIATION CENTER D, SUITE 600

CONDITIONING CONTRACTORS

R DRIVE 1209

FOR LATH AND PLASTER

1408

FPS ASSOCIATION

WILSON, SUITE 2400

ORDINATE, AND PROVIDE ALL USING, HANGERS OR OTHER SUPPORTS.

TRACTORS SHALL COMPLY WITH ALL ORDINANCES AS WELL AS STATE ORDINANCES AND DIVISION OF INDUSTRIAL RELATIONS.

THE PROPERTY OWNERS, AND CINGULAR WIRELESS WHICH MAY OCCUR DURING THE PROJECT, OR EQUIPMENT, ETC. SHALL BE TO THE SATISFACTION OF CINGULAR WIRELESS OR THE OWNER'S REPRESENTATIVE.

SELE FOR, AND SHALL REPLACE OR INFERIOR MATERIALS OR SHALL APPEAR WITHIN ONE YEAR OF THE WORK BY CINGULAR WIRELESS.

THE GENERAL CONTRACTOR TO THEIR SHOWN HEREIN OR NOT, AND TO THE CONTRACTOR SHALL BEAR ALL RISK OF UTILITIES OR OTHER WITH THE EXECUTION OF WORK.

VISIBLE FOR THE COMPLETE SECURITY JOB IS IN PROGRESS AND UNTIL THE BY CINGULAR WIRELESS.

TEMPORARY WATER, POWER AND TOILET TOILET OWNER, CINGULAR WIRELESS, TOILET.

ITED AND APPROVED PLANS PERTAINING TO A PLAN BOX AND SHALL NOT BE CHANGED. THE CONTRACTOR SHALL MAINTAIN ALL ALSO MAINTAIN IN GOOD PLANS WITH ALL REVISIONS, ADDENDUMS AND AT ALL TIMES. THESE ARE TO BE SUPERINTENDENT.

THE RUBBISH AND WASTE MATERIALS ON THE SITE SHALL BE UNDER STRICT CONTROL OVER JOB CLEANING. THE FINAL CLEAN-UP UPON COMPLETION OF THE PROJECT SHALL BE TO LEAVE TO BE LEFT IN A BROOM CLEAN STATE.

PERFORM WORK DURING PROPERTY AND DISRUPTION OF NORMAL ACTIVITY.

TEMPORARY CALVANIZED.

FIRE-RATED AREAS WITH U.L. LISTED OR IF AND WHERE APPLICABLE TO THIS PROJECT.

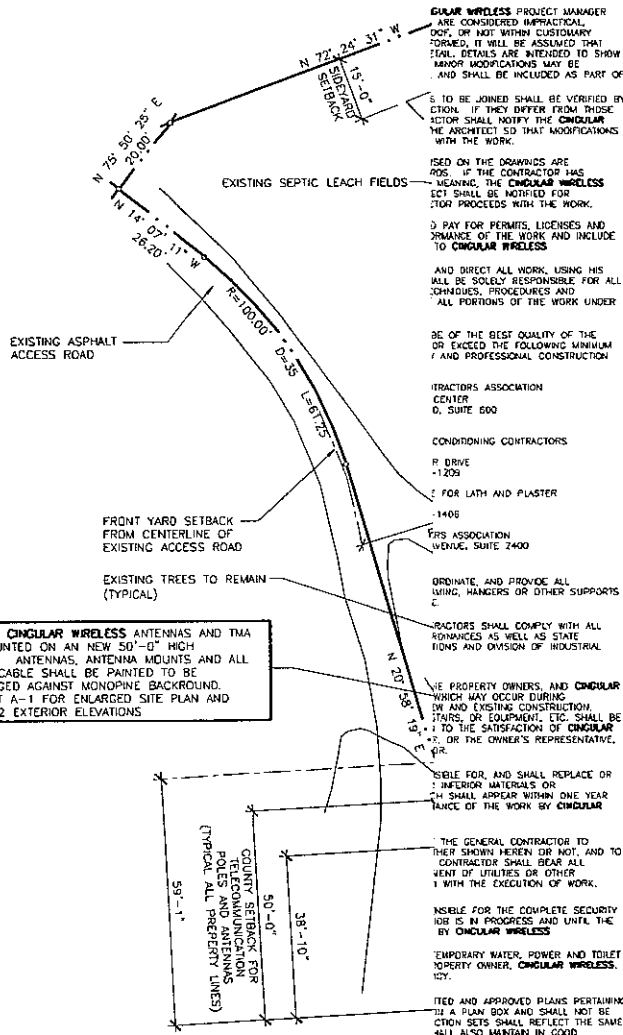
BE GROUNDED PER NEC ARTICLES 250

OR ENVELOPE OF CONDITIONED SPACES TRATIONS SHALL BE CAULKED OR IR AND MOISTURE.

THE CINGULAR WIRELESS PROJECT SHALL WITH PROPERTY OWNER OR

IT INFORMATION

15 SET OF CONSTRUCTION DOCUMENTS USE OR DISCLOSURE OTHER THAN THAT LESS IS STRICTLY PROHIBITED.



PROPOSED CINGULAR WIRELESS ANTENNAS AND TMA MOUNTS ON AN NEW 50'-0" HIGH MONOPINE. ANTENNAS, ANTENNA MOUNTS AND ALL EXPOSED CABLE SHALL BE PAINTED TO BE CAMOUFLAGED AGAINST MONOPINE BACKGROUND. SEE SHEET A-1 FOR ENLARGED SITE PLAN AND SHEET A-2 EXTERIOR ELEVATIONS.

The BMPs selected are those that will be implemented during construction of the project. The applicant is responsible for the placement and maintenance of the BMPs selected. A description of the BMPs and their application (available at the DPW counter) as follows:

- ☒ Silt Fence
- ☐ Fiber Rolls
- ☐ Street Sweeping and Vacuuming
- ☐ Storm Drain Inlet Protection
- ☐ Stockpile Management
- ☐ Solid Waste Management
- ☒ Stabilized Construction Entrance/Exit
- ☐ Dewatering Operations
- ☐ Vehicle and Equipment Maintenance
- ☐ Any minor slopes created incidental to construction and not subject to a major grading permit shall be protected by covering with plastic or tarp prior to a rain event. The vegetative cover shall be reestablished within 180 days of completion of the site prior to final building approval.
- ☐ No BMPs needed. Activities are not considered to generate pollutants.
- ☐ Desilting Basin
- ☐ Gravel Bag Berm
- ☒ Sandbag Barrier
- ☐ Material Delivery and Storage
- ☐ Spill Prevention and Control
- ☒ Concrete Waste Management
- ☐ Water Conservation Practices
- ☐ Paving and Grinding Operations

Booth & Suarez

ARCHITECTURE ■ PLANNING

WILLIAM H. BOOTH, ARCHITECT ROBERT J. SUAREZ, ARCHITECT
P.O. BOX 1655, CARLSBAD, CA 92018 (760) 434-8474



PREPARED FOR

cingular WIRELESS

6160 CORNERSTONE CT., SUITE 150
SAN DIEGO, CA 92121

APPROVALS

R.F.	DATE
<i>[Signature]</i>	7/7/04
CONSTRUCTION	DATE
<i>[Signature]</i>	7/7/04
OWNER APPROVAL	DATE

PROJECT NAME

WILLIAMS RESIDENCE

PROJECT NUMBER

SD-960-02

5240 SAN JACINTO CIRCLE, WEST FALLBROOK, CA 92028
SAN DIEGO

DRAWING DATES

10/22/03	PRELIM 2D REVIEW (JAB)
10/29/03	PRELIM 2D REVISION (CLB)
11/12/03	FINAL 2D REVIEW (row)
1/7/04	2D SUBMITTAL REVISIONS (JAB)
5/17/04	2D SUBMITTAL REVISIONS 2 (JAB)

SHEET TITLE

SITE PLAN & GENERAL SPECIFICATIONS

PROJECTS\cingular\03069zd\03069zd.A0.DWG

A-0